REMARKS

The present Amendment is in response to the Office Action mailed February 1, 2007. Claim 2-3, 7, 11, 13, 15-16, and 20 have been cancelled, and claims 1, 4-6, 8-10, 12, 14, 17-19, and 21-25 are amended. Claims 1, 4-6, 8-10, 12, 14, 17-19, and 21-25 are now pending in view of the above amendments.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants understanding and discussion of the references, if any, is consistent with the Examiner's understandings. Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Terminal Disclaimer

The Examiner has noted that the terminal disclaimer cited 10/729,721, but should have cited application 10/728,721. However, the Examiner notes that the rejections based on application 10/728,721 have been withdrawn based solely on the amendments to the claims. Thus, no additional terminal disclaimer has been filed.

Claim Objections

The Examiner objected to claims 1, 4-6, 8-10, 12, 17-19, and 21-24 for various informalities. These claims have been amended as required by the Examiner to overcome the objections.

Rejections Under 35 U.S.C. § 112

The Examiner objected to claims 14 and 25 under § 112, second paragraph, as being indefinite. Claim 14 was rejected has having insufficient antecedent basis for "the data tuples" and claim 25 was rejected as being unclear with regard to the pronoun "it" in line 9. Claims 14 and 25 have been amended to overcome this rejection as required by the Examiner.

Rejection Under 35 U.S.C. § 101

The Office Action rejected claims 1, 4, 12, 14, 17 and 25 under 35 U.S.C. § 101 because the claimed invention is directed toward non-statutory subject matter. Claims 4, 12, 17 and 24 were rejected as incorporating the deficiencies of claims 1 and 14. Claim 25 was rejected as software *per se*.

The independent claims 1, 14, and 25 have been amended to overcome the rejection. As indicated by the Examiner, storing the data resulting from the production step is a file, as recited for example in claims 5 and 6, would overcome the rejection. Claim 1, 14, and 25 have been amended to recite storing the produced data in the database. As a result, Applicant respectfully requests withdrawal of the rejection under § 101 because the tangible result requirement is satisfied, as indicated by the Examiner.

Rejection Under 35 U.S.C. §102

The Office Action rejected claims 1, 5, 6, 8-10, 12, 14, 18, 19 and 21-25 under 35 U.S.C. § 102(e)[1] as being anticipated by U.S. Patent Publication No. 2003/0120458 (*Rao*). Because *Rao* does not teach or suggest each and every element of the rejected claims, Applicants respectfully traverse this rejection in view of the following remarks.

The Office Action suggests that the limitations of claim 1 are taught by *Rao*. The Office Action states, for example, that the requirement of "using linguistic information contained in the free text to extract multi-dimensional relational facts from the free text, each multi-dimensional relational fact including a plurality of attributes concerning the

---

[1] Because *Rao* is only citable under 35 U.S.C. § 102(e) Applicants do not admit that *Rao* is in fact prior art to the claimed invention but reserve the right to swear behind *Rao* if necessary to remove it as a reference.

free text from which it was extracted" is taught by *Rao*. Applicants respectfully disagree in light of the amendments and remarks herein.

Claim 1 has been amended to clarify that the plurality of attributes of the free text include at least syntactic roles and thematic roles. Thus, the multi-dimensional relational fact includes the syntactic roles and the thematic roles.

Rao, in contrast to claim 1, is directed to patient data mining which relies on probabilistic assertions. *Rao* states that extraction "from a text source may be carried out by phrase spotting, which requires a list of rules that specify the phrases of interest and the inferences that can be drawn therefrom." *See* ¶[0043]. The probabilistic aspect is evident because, once a phrase is spotted (such as "there is evidence of metastatic cancer in the liver"), a "rule is needed that directs the system to look for the phrase "metastatic cancer," and, if it is found, to assert that the patient has cancer with a high degree of confidence." *See Id.*

In contrast, the syntactic roles and thematic roles required by claim 1 are not taught or suggested by a list of rules that specify phrases of interest and the inferences that can be drawn therefrom.

As the Examiner is aware, the pending claims must be given their broadest reasonable interpretation consistent with the specification. Producing thematic roles of free text using syntactic roles as input is not taught or suggested by probabilistic assertions that include phrase spotting. More specifically, thematic roles, as noted in the specification, can simplify the form of the information contained in text records by reducing or removing certain grammatical information, which has the effect of removing the corresponding categories for each grammatical permutation. This has the advantage of simplifying the requirement of producing the set of construed data which is required in claim 1.

Rao, in contrast, teaches the extraction of data in a uniform format called probabilistic observations. *See* ¶[0079]. This includes extracting information via phrase spotting (*see* ¶[0081]) using various rules. However, this type of computational approach fails to teach or suggest the requirements of claim 1, which requires both extracting syntactic roles and producing thematic roles as discussed above.

For at least these reasons, Applicants respectfully submit that claim 1 is patentable over the cited art. The independent claim 14 and 25 are also patentable for at least the same reasons. The dependent claims rejected under § 102 are patentable for the same reasons.

Rejection Under 35 U.S.C. § 103

The Office Action rejected claims 4 and 17 under 35 U.S.C. § 103(a) as being unpatentable over *Rao* in view of "Information Extraction: Beyond Document Retrieval", 1998 (*Gaizauskas*). Because claims 1 and 14 are patentable for at least the reasons discussed herein, claims 4 and 17 are patentable for at least the same reasons.

Conclusion

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 8th day of February, 2008.

Respectfully submitted,

/Carl T. Reed/ Reg. # 45454
CARL T. REED

Registration No. 45,454
Attorney for Applicant
Customer No. 022913
Telephone No. 801.533.9800

W:\17354\4.1\MJW0000001691V001.doc